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10/083,296	02/27/2002	Seiji Suzuki	12010-0021	5525

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EXAMINER

FISCHER, JUSTIN R

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/083,296

Applicant(s)

SUZUKI, SEIJI

Examiner

Justin R Fischer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 3, 2004 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 3, 5, 10, 14, and 16 are rejected under 35 U.S.C. 102(e) as being

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anticipated by Van Eperen (US 6,235,137, of record). Van Eperen is applied in the same manner as set forth in the Final Rejection mailed on September 3, 2004.

As best depicted in Figure 13, Van Eperen discloses a method of securing an elastic member to a sheet material using an adhesive, wherein said adhesive is continuously applied on the peripheral surface of the elastic member in an undulating pattern about the axis of strand member, wherein said undulating pattern is seen to constitute a sine curve shape. Also, as depicted in Figure 13, the undulating pattern has a uniform cycle. It is emphasized that Figure 13 clearly depicts the adhesive as having a drooped portion that extends further than the peripheral portion of the strand member (both on the underside or back side of the strand member and the front side of the strand member)- this clearly suggests that the height of the undulation (in a developed view of the peripheral surface of the strand) would be substantially equal to or greater than the circumferential length of the strand member (over a given period or cycle).

As to claim 3, the claim is directed to both the use and non-use of tension as pertains to the sheet material and as such, Van Eperen anticipates this claim. It is further noted that Van Eperen suggests that the sheet material can be folded to enclose the elastic member, which suggests a certain degree of tensioning.

Regarding claim 5, the method of Van Eperen is directed to a variety of manufactured articles, including disposable articles such as disposable diapers and feminine care products.

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With respect to claim 10, as best depicted in Figure 13, completely encircles the periphery of the strand member in making the sine curve shape.

Regarding claims 14 and 16, the adhesive of Van Eperen is deposited in cycles, each cycle having a starting point on a first longitudinal line and following a path that goes beyond a second longitudinal line that is diametrically opposite said first longitudinal line. This is particularly evident in Figure 13, in which the adhesive extends over a first and second longitudinal line (front side and rear side) within a given cycle or wavelength.

4. Claims 6-9, 11, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kwok (US 6,077,375, of record).

As best depicted in Figures 2a and 3, Kwok '375 discloses a method of applying adhesive (40) to an elastic strand (30) and subsequently bonding said strand to a sheet material, wherein said adhesive is applied as a continuous, undulating pattern having a uniform cycle. In particular, the adhesive pattern depicted in the above noted figures is an S-shape. Furthermore, Kwok '375 specifically states that the fiber portions 42 and 44 extend sufficiently beyond the corresponding sides of the strand member so as to adhere to an underside of the strand (Column 4, Lines 51-60 and Column 5, Lines 3-14)- this is particularly evident from Figure 2a in which the adhesive is depicted as being arranged (on the underside) at the point defined by an axis perpendicular to the longitudinal direction of the strand. Thus, it is clear that the drooped portions on opposing sides would be adjacent one another (on the underside) and thus would define, at a minimum, an assembly in which the height of the undulation (in a developed

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view of the peripheral surface of the strand) would be substantially equal to the circumferential length of the strand.

As to claim 8, the claim is directed to both the use and non-use of tension as pertains to the sheet material and as such, Kwok '375 anticipates this claim.

With respect to claim 9, Kwok '375 is directed to a process for making a wide variety of fluid absorbing articles, including diapers (Column 1, Lines 15-25).

Regarding claim 11, it is evident from Figures 2a and 3 that the adhesive encircles the entire periphery of the strand.

With respect to claims 15 and 17, the adhesive of Kwok '375 is clearly existent over a first and second longitudinal line within a given cycle or wavelength (longitudinal lines represent the longitudinal axis on the front side and the rear side).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Eperen. As best depicted in Figure 13, the adhesive material is deposited on a strand member in a sine curve shape, wherein drooped portions that extend beyond the periphery of the strand member are present. These drooped portions are captured by the strand member in such a manner that substantially the entire strand member is covered. While the reference fails to provide an express disclosure for an adhesive

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deposition in which the undulation height is greater than the circumferential length of the strand member, it is clearly evident that the width and amplitude of the adhesive will dictate what regions of the strand are covered by the adhesive material. Van Eperen clearly states that the traversing distance 38 (Figure 12) can be varied from a minimum of 0.1 cm up to a maximum of 0.6 cm (Column 20, Lines 34-47). In view of this disclosure, one of ordinary skill in the art at the time of the invention would have found it obvious to form an assembly in which the undulation height is greater than the circumferential length of the strand member (embodiments having high traverse distance) absent any conclusive showing of unexpected results. In such an instance, the bonding area between the strand member and the substrate is increased.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwok '375. In describing the adhesive application, Kwok '375 states that the drooped portions extend sufficiently outwardly beyond the corresponding sides of the strand so that adhesive is arranged over the underside of the strand (best depicted in Figure 2a). The reference further teaches that the adhesive migrates along the sides of the strands and across the underside thereof to at least partially coat all sides thereof (Column 5, Lines 5-30). While it is unclear if the first drooped portion overlaps (or goes beyond) a second drooped portion (in an underside region of Figure 2a), it is well recognized that it is highly desirable to increase the bonding area between the strand member and the substrate. It is emphasized that Kwok '375 does state that the adhesive (drooped portion) extends across the underside of the strand- one of ordinary skill in the art at the time of the invention would have found it obvious to deposit the adhesive such that the drooped

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portions overlapped (results in greater undulation height as compared to the circumferential length of the strand member) in order to obtain the above noted increased bonding area, there being no conclusive showing of unexpected results to establish a criticality for the claimed arrangement. Lastly, it is noted that Kwok '375 does recognize the capability of depositing a drooped portion (in the under side) beyond a plane defined by the longitudinal axis of the strand (Column 5, Lines 10-15).

### ***Response to Arguments***

8. Applicant's arguments filed December 3, 2004 have been fully considered but they are not persuasive. Applicant contends that Kwok '635 and Van Eperen fail to teach that the adhesive forms a continuous line that is equal to or greater than the circumference of the elastic member. It is emphasized that as currently drafted that the claims only require that the adhesive define a continuous line that is substantially equal to the circumferential length of the strand- as depicted in Figures 3 and 13, respectively, the adhesive is deposited in such an arrangement. It is further noted that Kwok '635 references an additional patent (Kwok '375) in order to more clearly illustrate the deposition arrangement of the adhesive. Furthermore, since Kwok '375 is seen to incorporate the relevant teachings of Kwok '635, the rejections with Kwok '635 have been withdrawn and replaced with rejections under Kwok '375. It is emphasized that the claims as currently drafted do not require the specific arrangement (around the entire periphery of the strand) detailed by Figures 2 or 4 of the claimed invention- the claims only require that the height of the undulation (in a developed view of the



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peripheral surface of the strand) be substantially equal to or greater than the circumferential length of the strand.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Justin Fischer

August 31, 2004